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10/500830 INVESTOR IN PEOPLE

The Patent Office

Concept House

Cardiff Road

Newport

South Wales

NP10 8QW

REC'D 21 MAY 2003

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I, the undersigned, being an officer duly authorised in accordance with Section 74(1) and (4) of the Deregulation & Contracting Out Act 1994, to sign and issue certificates on behalf of the Comptroller-General, hereby certify that annexed hereto is a true copy of the documents as originally filed in connection with the patent application identified therein.

I also certify that the attached copy of the request for grant of a Patent (Form 1/77) bears an amendment, effected by this office, following a request by the applicant and agreed to by the Comptroller-General.

In accordance with the Patents (Companies Re-registration) Rules 1982, if a company named in this certificate and any accompanying documents has re-registered under the Companies Act 1980 with the same name as that with which it was registered immediately before re-registration save for the substitution as, or inclusion as, the last part of the name of the words "public limited company" or their equivalents in Welsh, references to the name of the company in this certificate and any accompanying documents shall be treated as references to the name with which it is so re-registered.

In accordance with the rules, the words "public limited company" may be replaced by p.l.c., plc, P.L.C. or PLC.

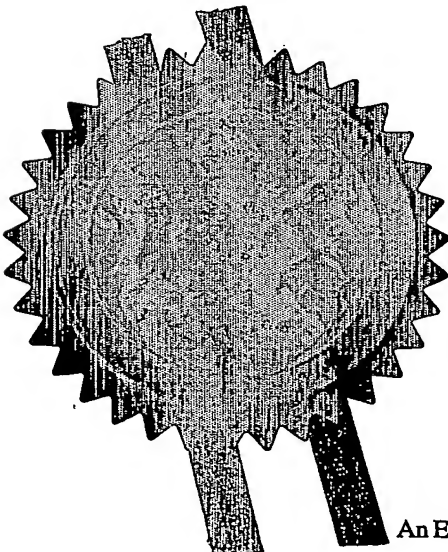
Re-registration under the Companies Act does not constitute a new legal entity but merely subjects the company to certain additional company law rules.

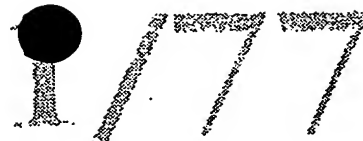
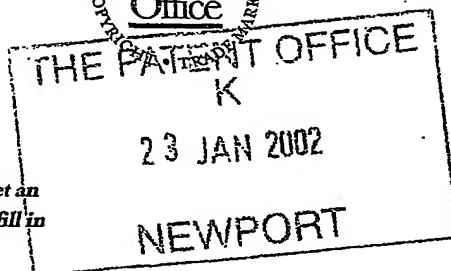
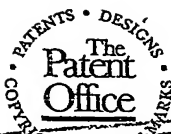
### PRIORITY DOCUMENT

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Signed

Dated 12 May 2003





# Request for grant of a patent

(See the notes on the back of this form. You can also get an explanatory leaflet from the Patent Office to help you fill in this form)

The Patent Office

Cardiff Road  
Newport  
South Wales  
NP10 8QQ

1. Your reference

AJL/IR/P4964

23 JAN 2002

2. Patent application number

(The Patent Office will fill in this part)

0201403.3

23JAN02 E689921-1 D00318

P01/7700 0.00-0201403.3

3. Full name, address and postcode of the or of each applicant (underline all surnames)

Adrianne Jacqueline Jones,  
Fron Farm,  
Brynpydew  
Llandudno Junction  
Conway. LL31 9QD

Patents ADP number (if you know it)

If the applicant is a corporate body, give the country/state of its incorporation

830 9114001

4. Title of the invention

IMPROVEMENTS IN AND RELATING TO TREE AND SHRUB PROTECTION

5. Name of your agent (if you have one)

"Address for service" in the United Kingdom to which all correspondence should be sent (including the postcode)

~~ROYSTONS~~

~~Tower Building,  
Water Street,  
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L J Bray & Co  
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HX7 7AF

8/27

Patents ADP number (if you know it)

1438001

6. If you are declaring priority from one or more earlier patent applications, give the country and the date of filing of the or of each of these earlier applications and (if you know it) the or each application number

~~Country~~

Priority application number  
(if you know it)

Date of filing  
(day / month / year)

7. If this application is divided or otherwise derived from an earlier UK application, give the number and the filing date of the earlier application

Number of earlier application

Date of filing  
(day / month / year)

8. Is a statement of inventorship and of right to grant of a patent required in support of this request? (Answer 'Yes' if:

NO

- a) any applicant named in part 3 is not an inventor, or
  - b) there is an inventor who is not named as an applicant, or
  - c) any named applicant is a corporate body.
- See note (d))

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Patents Form 1/77

9. Enter the number of sheets for any of the following items you are filing with this form. Do not count copies of the same document

Continuation sheets of this form

Description

4

Claim(s)

-

Abstract

-

Drawing(s)

1 + 1 RW

10. If you are also filing any of the following, state how many against each item.

Priority documents

Translations of priority documents

Statement of inventorship and right to grant of a patent (Patents Form 7/77)

Request for preliminary examination and search (Patents Form 9/77)

Request for substantive examination (Patents Form 10/77)

Any other documents  
(please specify)

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11.

I/We request the grant of a patent on the basis of this application.

Signature

Date

22 January 2002

ROYSTONS - Authorised Agents

12. Name and daytime telephone number of person to contact in the United Kingdom

Mr. A.J. Lyons - 0151-236 5147/1417

Warning

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Notes

- If you need help to fill in this form or you have any questions, please contact the Patent Office on 08459 500505.
- Write your answers in capital letters using black ink or you may type them.
- If there is not enough space for all the relevant details on any part of this form, please continue on a separate sheet of paper and write "see continuation sheet" in the relevant part(s). Any continuation sheet should be attached to this form.
- If you have answered 'Yes' Patents Form 7/77 will need to be filed.
- Once you have filled in the form you must remember to sign and date it.
- For details of the fee and ways to pay please contact the Patent Office.

Title: Improvements in and relating to tree and shrub protection

DESCRIPTION

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This invention concerns improvements in and relating to tree and shrub protection.

When young trees and shrubs are first planted it is desirable to provide them with support and protection. Without support there is the risk of the trees or shrubs being knocked down or at least leaning over due to the effects of wind, ground erosion or the attention of animals. Again protection is needed to prevent damage caused by animals or vandalism.

Typically, young trees and shrubs have their lower parts enclosed in a tubular support that expands as the tree or shrub grows. Such supports are provided in photodegradable plastics material that is supposed to degrade fully within 3 or 4 years. It has been found, however, that such supports do not fully degrade within that time frame, so that unsightly remains of the supports can still be present on the trees or shrubs for some considerable time. As much tree and shrub planting is carried out for landscaping purposes, having the supports still visible some years after planting is undesirable. In order to remedy the situation it is common practice to physically remove the supports after a suitable period of time but that is a time consuming, labour intensive and, hence, costly operation.

An object of the present invention is to provide a tree or shrub support that will degrade within a reasonable time frame.

According to the present invention it is proposed that tree and shrub supports of the type that enclose the tree or shrub trunk be made of biodegradable material.

The preferred tree supports according to the invention will be cylindrical. Preferably the supports of the invention will also be expandable. Typically, the supports will be made from a sheet of suitable material that is formed into a roll that overlaps itself. Then the sheet can be opened out to fit around the tree or shrub when it resumes its rolled up state. Because it overlaps itself it can expand as the tree or shrub trunk grows in diameter.

It is further preferred that the supports of the invention be wider at one end, which, in use, will be the upper end. The upper end of the support will preferably have a bell shape.

It will be appreciated that the tree and shrub supports of the invention may take other forms provided that they are made of biodegradable material.

The supports of the invention are preferably able to protect a variety of tree and shrub shapes. Preferably they will be capable at least of protecting tree and shrub trunks of diameters in the range of 0.08 to 0.12m and of heights in the range of 0.6 to 1.2m.

The preferred supports of the invention may be made of any suitable biodegradable material that can provide support and protection to tree and shrub trunks. The biodegradable material for use in the invention may be based on waxed cardboard or may be based on hemp or flax, such as waste products from hemp or flax that are currently produced by Bio-Fibre.

It is preferred that materials for use in the present invention be fully biodegradable within two or three years of installation. That should be sufficient time for

most trees and shrubs to grow to a self-sustainable size and should not be so long that a further operation is needed to remove unsightly remains of tree or shrub supports.

An advantage of tree and shrub supports of the present invention is that rate of degradation and its effectiveness is not reliant solely on sunlight but also on other environmental conditions and agents.

This invention will now be further described, by way of example only, with reference to the accompanying drawings, in which:

Figure 1 shows a typical tree support according to the invention; and

Figure 2 shows a tree support of Figure 1 in situ.

Referring to Figure 1 of the accompanying drawings, a tree support 10 is basically tubular. The support is made from a single sheet of biodegradable material rolled into a tube with overlapping ends. The top end 12 of the tube-shape is flared in order to accommodate the gradual increase in girth of a tree from bottom to top of its trunk.

The support is made of biodegradable material, such as waxed cardboard or a material made from hemp or flax waste products, although other suitable materials may be available.

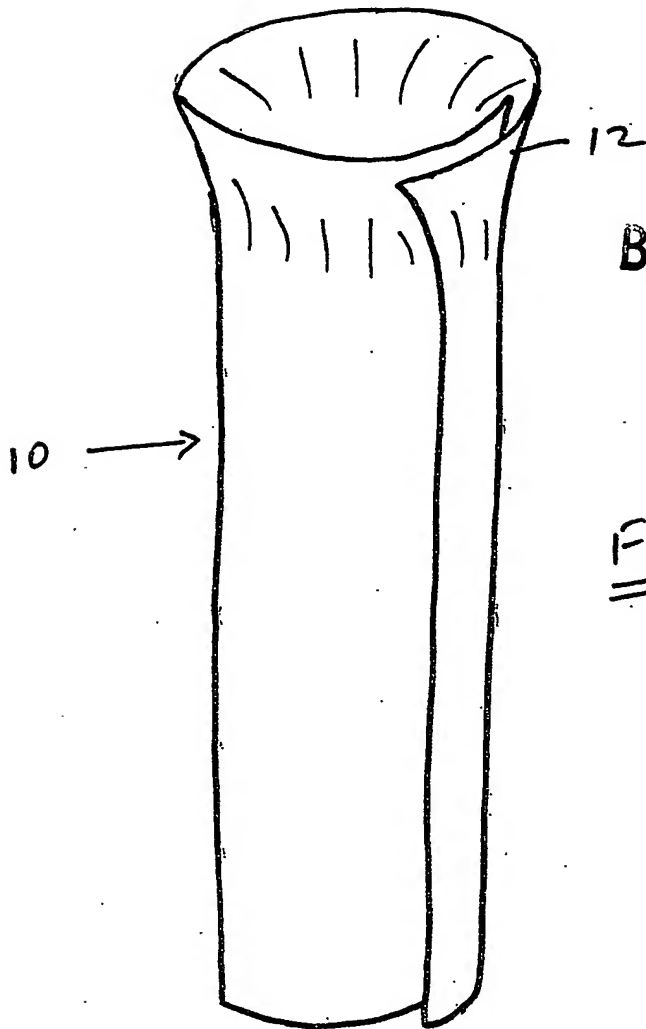
As can be seen from Figure 2 of the accompanying drawings the support 10 is placed around the trunk of a tree 14 close to the ground to provide support and protection to the tree, especially against the effects of the wind and of the attention of animals. The overlapping ends of the tube-shape allow the support to expand as the tree grows in diameter. After two or three years the support will have degraded substantially

completely, so that no further work will be required to remove unsightly remains of the support.

The supports of the invention may be used with trees and with shrubs and will usually be provided in sizes to accommodate tree and shrub trunks of diameters in the range of 0.08 to 0.12m and heights of 0.6 to 1.2m, although it will be appreciated that other sizes of support may be provided in accordance with the invention.

It will further be appreciated that the use of biodegradable materials in producing tree and shrub support and protection apparatus may be extended to supports of other types than that illustrated in the accompanying drawings.

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FIG 1

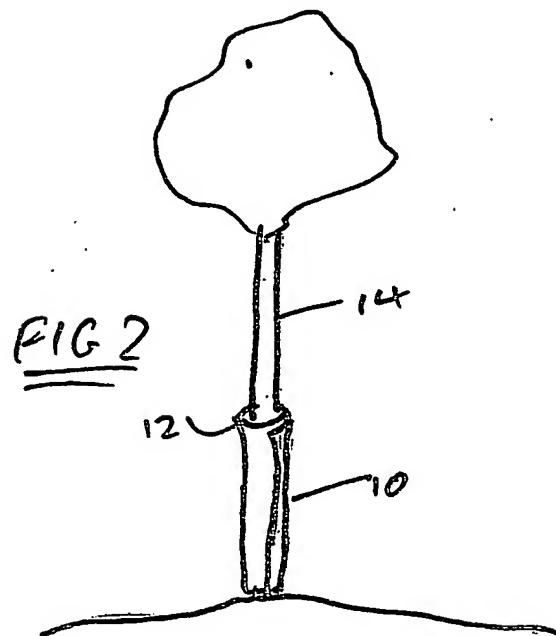


FIG 2